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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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KAZUAKI TSUCHIYA

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07/05/2007

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.

1800 DIAGONAL ROAD

SUITE 370

ALEXANDRIA, VA 22314

EXAMINER

PYZOCHA, MICHAEL J

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 09/455,363	Applicant(s) TSUCHIYA ET AL.	
	Examiner Michael Pyzocha	Art Unit 2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 26-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 32 and 35 is/are allowed.
- 6) ☒ Claim(s) 26-31, 33, 34, 36 and 37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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**DETAILED ACTION**

1. Claims 26-37 are pending.
2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/30/2007 has been entered.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 26-31, 33, 34, 36, and 37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claims 26 and 29 recite the phrase "coincides sufficiently" which renders these claims indefinite. It is unclear to what degree "sufficiently" relates.

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6. Any claims not specifically addressed are rejected by virtue of their dependencies.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 26-27, 29-30, 33, 34, 36, 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dobbins et al (US 5485455) in view of Jain et al (US 6311218) and further in view of Inoue et al (US 6891819).

As per claims 26 and 29, Dobbins et al discloses a network relaying method for a communication network system in which a plurality of network devices are coupled via a communication path, each network device including a network relaying device which is coupled via a plurality of I/O ports to a corresponding plurality of terminals (see column 7 line 60 through column 8 line 21), the method comprising the steps of:

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receiving a packet at a first I/O port from a source terminal coupled to the first I/O port, the packet including a header containing a packet transmission source address (see column 8 lines 30-34);

determining whether a first combination of information contained in the received packet coincides with a second combination of information that has been registered in advance, wherein said first combination of information includes the first I/O port and the packet transmission source address of the received packet and said second combination of information includes an I/O port and a transmission source address that have been registered in advance with a correspondence there between, and, in response to the determining step resulting in a determination that the first combination of information coincides with a second combination of information, transferring the packet received at the first I/O port via a second I/O port, wherein said first combination of information includes the first I/O port and the packet transmission source address of the received packet and said second combination of information includes an I/O port and a transmission source address that have been registered in advance with a correspondence there between (see column 8 lines 35-36 and column 9 lines 38-46);

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in response to the determining step resulting in a determination that the first combination of information does not have a coincide with a the second combination of information: limiting transfer of the received packet registering the first I/O port with a correspondence to the packet transmission source; and transferring the packet received at the first I/O port via the second I/O port (see column 8 line 37 through column 9 line 37 and claim 4).

Dobbins et al fails to disclose transmitting a request for user authentication of a user to the source terminal; receiving user authentication information sent from the source terminal in response to the request for user authentication; executing user authentication of the user based on the user authentication information thus received and based on the packet transmission source address.

However, Jain et al teaches such authentication (see column 5 line 21 through column 6 line 15).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to Jain et al's authentication method in Dobbins et al's connection method.

Motivation to do so would have been to authenticate and unauthenticated port (see Jain et al column 5 lines 20-40).

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The modified Dobbins et al and Jain et al system fails to explicitly disclose when the user is not authenticated, not transferring the packet.

However, Inoue et al teaches such a limitation (see column 12 lines 21-44).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the authentication processing steps of Inoue et al in the modified system of Dobbins et al and Jain et al.

Motivation to do so would have been to cope with a password guessing attack (see Inoue et al column 12 lines 21-44).

As per claims 27 and 30, the modified Dobbins et al, Jain et al and Inoue et al system discloses the authentication including a user name (see Jain et al column 5 lines 20-40), but fails to disclose a password. However Official Notice is taken that at the time of the invention it would have been obvious to one of ordinary skill in the art to include a password for the authentication in the modified system. Motivation to do so would have been to provide authorized access to the system.

As per claims 33 and 36, the modified Dobbins et al, Jain et al and Inoue et al system discloses the step of performing user authentication periodically for each of said plurality of

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terminals having an address registered in advance with a correspondence to an I/O port (see Jain column 5 lines 20-40).

As per claims 34 and 37, the modified Dobbins et al, Jain et al and Inoue et al system discloses determining whether the destination address is registered in advance as a source address in combination with an I/O port (see Dobbins et al column 8 lines 30-36); if the determining step determines that the destination address of the received packet is not registered in advance as a source address in combination with an I/O port, user authentication is made as to a destination terminal having the destination address, by transmitting a request for user authentication to the destination terminal of the received packet (see Dobbins column 8 lines 30-36 and column 9 lines 38-46 and Jain column 5 line 20 through column 6 line 15); receiving user authentication information sent from the destination terminal in response to the request for user authentication based on the user authentication information thus received from the destination terminal (see Jain column 5 line 20 through column 6 line 15); when the user is authenticated by the user authentication based on the user authentication information received from the destination terminal, registering the first I/O port with a correspondence to the destination address; and when the user is not authenticated by the user



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authentication based on the user authentication information received from the destination terminal, not registering the first I/O port with a correspondence to the destination address (see Dobbins column 8 lines 30-36 and column 9 lines 38-46 and Inoue et al column 16 lines 6-21).

9. Claims 28 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Dobbins et al, Jain et al and Inoue et al system as applied to claims 26 and 29 above, and further in view of Townsend et al (US 5661719).

As per claims 28 and 31, the modified Dobbins et al, Jain et al and Inoue et al system teaches the transmission source address includes a MAC address (see Dobbins et al column 9 lines 10-25).

The modified Dobbins et al, Jain et al and Inoue et al system fails to teach the transmission source address also includes an IP address.

However, Townsend et al teaches a transmission source address includes an IP and MAC address (see column 3 lines 13-24).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to include both address in the modified Dobbins et al, Jain et al and Inoue et al system.

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Motivation to do so would have been to have both the physical and logical address of the source (see Townsend et al column 3 lines 13-24).

***Allowable Subject Matter***

10. Claims 32 and 35 are allowed.
11. Reasons for allowance have been put forth in the action mailed 01/30/2007 and are not repeated for the sake of brevity.

***Response to Arguments***

Applicant's arguments filed 12/12/2006 have been fully considered but they are not persuasive. Applicant argues that Dobbins fails to teach a coincidence between a first combination of information and a second combination of data registered in advance; Jain fails to teach the authentication based on the packet transmission source address; and Inoue's authentication is performed at the wrong location.

With respect to Applicant's argument that Dobbins fails to teach a coincidence between a first combination of information and a second combination of data registered in advance, Applicant is directed to column 9 lines 38-46 where the information collected as described in column 8 and the top of column 9 is used to this comparison. Specifically the source

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address, destination address and source port are compared against previously stored combinations of this data to determine the correct path. Therefore, Dobbins teaches a coincidence between a first combination of information and a second combination of data registered in advance.

With respect to Applicant's argument that Jain fails to teach the authentication is based on the packet transmission source address, the execution of the authentication is **based on** the source address (emphasis added). Therefore when a port in Dobbins cannot be authenticated (i.e. when the source address is not correct causing a packet to not be transmitted see column 9 lines 38-46) the authentication needs to be executed. This is where the methods of Jain are used. Therefore, the combination of Dobbins and Jain teaches the execution of the authentication is based on the packet transmission source address.

With respect to Applicant's argument that Inoue's authentication is performed at the wrong location, Inoue was merely relied upon for the teaching of stopping the transmission of data from a non-authenticated network device. Therefore, when this teaching combined with the authenticating/routing device of the Dobbins and Jain combination it teaches the claimed limitations.

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**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Pyzocha whose telephone number is (571) 272-3875. The examiner can normally be reached on 7:00am - 4:30pm first Fridays of the bi-week off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJP

  
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